

INTERIM ACTUARIAL VALUATION PREPARED AS OF JUNE 30, 2004  
USED TO DETERMINE  
CONTRIBUTIONS FOR FISCAL YEARS ENDING  
JUNE 30, 2006 AND JUNE 30, 2007  
FOR THE  
NEW HAMPSHIRE RETIREMENT SYSTEM

DOC:V00735JC.DOC





October 22, 2004

Board of Trustees  
New Hampshire Retirement System  
4 Chenell Drive  
Concord, New Hampshire 03301-8509

Ladies and Gentlemen:

RSA 100-A:14, Paragraph X, of the law governing the New Hampshire Retirement System provides in part that the actuary is to make periodic valuations of the contingent assets and liabilities of the funds of the retirement system.

The interim actuarial valuation of the system, prepared as of June 30, 2004, has now been completed and the results are presented in this report, along with the results of the June 30, 2005 and June 30, 2006 forecast valuations.

The valuations were based on the open group aggregate funding method required under RSA 100:A-16 as revised in 1992 and on the same assumptions used in the June 30, 2003 valuation.

The Board of Trustees in September, 2004 adopted revised target funding assumptions. The target funding goal is based on a funding target of 115% over a 30 year time horizon using an 8% interest rate.

The valuation and the forecast valuations are based on the assets as of June 30, 2004 and on the demographic data as of June 30, 2003 adjusted to reflect various amendments effective since June 30, 2003. The more significant changes, in brief, provide certain cost-of-living increases and provide postretirement medical coverage for certain Policemen and Firemen members. Please refer to Section I of the report for an outline of all pertinent legislation.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

(Signed) JANET H. CRANNA

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Principal, Consulting Actuary

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## SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding regular valuations are summarized below

### GROUP I

	EMPLOYEES		TEACHERS	
	2003	2004 <sup>ø</sup>	2003	2004 <sup>ø</sup>
1. Membership				
(a) Number of active members	26,371	26,371	18,710	18,710
(b) Annual compensation	\$798,240,652	\$842,028,902 <sup>øø</sup>	\$799,543,975	\$826,821,630 <sup>øø</sup>
(c) Inactives#	3,462	3,462	2,233	2,233
(d) Pensioners and beneficiaries (including deferred vesteds)	9,404	9,404	5,427	5,427
(e) Annual benefits in payment	\$85,067,325	\$85,067,325	\$87,580,043	\$87,580,043
2. Liabilities of the System:				
(a) For active members**	\$2,598,765,819	\$2,733,522,412	\$2,372,656,736	\$2,486,928,924
(b) For pensioners and beneficiaries (including deferred vesteds)	<u>707,770,313</u>	<u>768,869,062</u>	<u>777,173,126</u>	<u>847,433,324</u>
(c) Total	\$3,306,536,132	\$3,502,391,474	\$3,149,829,862	\$3,334,362,248
3. Valuation assets (five-year moving market average method)	\$1,192,253,207	\$1,216,559,401	\$1,589,887,378	\$1,594,677,790
4. Special Account	\$101,169,799	\$96,241,440	\$124,173,899	\$119,071,116
5. Total liability to be funded [2.(c)-3.+4.]	\$2,215,452,724	\$2,382,073,513	\$1,684,116,383	\$1,858,755,574
6. Present value of future member contributio	\$1,001,507,298	\$1,047,648,213	\$871,064,888	\$907,852,495
7. Unfunded accrued liability	\$30,048	\$23,571	\$108,567	\$56,619
8. Future normal contributions	\$1,213,915,378	\$1,334,401,729	\$812,942,928	\$950,846,460
9. Normal contribution rate				
(a) State	N/A	N/A	1.63%	1.83%
(b) Employing subdivision	<u>N/A</u>	<u>N/A</u>	<u>3.04%</u>	<u>3.41%</u>
(c) Total*	6.06%	6.37%	4.67%	5.24%
10. Target contribution rate				
(a) State	N/A	N/A	2.90%	2.00%
(b) Employing subdivision	<u>N/A</u>	<u>N/A</u>	<u>5.39%</u>	<u>3.70%</u>
(c) Total*	8.81%	6.81%	8.29%	5.70%
11. Accrued liability contribution	\$8,900	\$4,738	\$56,623	\$56,619

# Includes those members who were reported as inactive as well as those members who were reported as active but did not have any compensation reported for 2 consecutive fiscal years.

\* Applicable to compensation of each employer's participating employees. Contribution rate applies to the respective payrolls of each employer.

\*\* Includes liability for the inactives.

ø Based on June 30, 2003 valuation data.

øø Estimated.

## GROUP II

	POLICEMEN		FIREMEN	
	2003	2004 <sup>ø</sup>	2003	2004 <sup>ø</sup>
1. Membership				
(a) Number of active members	4,305	4,305	1,524	1,524
(b) Annual compensation	\$196,021,654	\$206,651,567 <sup>øø</sup>	\$79,071,785	\$83,083,449 <sup>øø</sup>
(c) Inactives#	210	210	25	25
(d) Pensioners and beneficiaries (including deferred vesteds)	1,810	1,810	1,003	1,003
(e) Annual benefits in payment	\$47,406,412	\$47,406,412	\$26,601,881	\$26,601,881
2. Liabilities of the System:				
(a) For active members**	\$1,268,324,467	\$1,342,688,496	\$567,918,077	\$598,887,726
(b) For pensioners and beneficiaries (including deferred vesteds)	<u>452,451,290</u>	<u>483,328,103</u>	<u>249,102,267</u>	<u>268,874,166</u>
(c) Total	\$1,720,775,757	\$1,826,016,599	\$817,020,344	\$867,761,892
3. Valuation assets (five-year moving market average method)	\$712,139,098	\$719,056,420	\$365,855,411	\$370,857,135
4. Special Account	\$48,305,146	\$43,567,791	\$47,719,158	\$41,954,962
5. Total liability to be funded [2.(c)-3.+4.]	\$1,056,941,805	\$1,150,527,970	\$498,884,091	\$538,859,719
6. Present value of future member contributions	\$454,137,926	\$475,308,708	\$180,986,454	\$189,191,469
7. Unfunded accrued liability	\$502,308	\$261,971	\$269,133	\$140,360
8. Future normal contributions	\$602,301,571	\$674,957,291	\$317,628,504	\$349,527,890
9. Normal contribution rate				
(a) State	4.32%	4.62%	5.71%	6.01%
(b) Employing subdivision	<u>8.01%</u>	<u>8.58%</u>	<u>10.60%</u>	<u>11.16%</u>
(c) Total*	12.33%	13.20%	16.31%	17.17%
10. Target contribution rate				
(a) State	6.76%	5.22%	10.17%	7.73%
(b) Employing subdivision	<u>12.55%</u>	<u>9.68%</u>	<u>18.89%</u>	<u>14.36%</u>
(c) Total*	19.31%	14.90%	29.06%	22.09%
11. Accrued liability contribution	\$261,968	\$261,971	\$140,362	\$140,360

# Includes those members who were reported as inactive as well as those members who were reported as active but did not have any compensation reported for

\* Applicable to compensation of each employer's participating employees. Contribution rate applies to the respective payrolls of each employer.

\*\* Includes liability for the inactives.

ø Based on June 30, 2003 valuation data.

øø Estimated.

2. Comments on the interim valuation results as of June 30, 2004 are given in Section V. Section VI presents the bases and results of the forecast valuations. Section VII discusses the contribution requirements for fiscal years 2006 and 2007 and Section VIII discusses the postretirement medical coverage valuation results.
3. The 2004 valuations were prepared on the basis of the open group aggregate funding method\*, and the assumptions and methods used in the June 30, 2003 valuation. A summary of the actuarial assumptions for each membership classification is set forth in Schedule A along with a description of the various methods employed in the valuations. Included in the current assumptions is an interest assumption of 9% compounded annually and an average annual salary increase assumption of 6%, as adopted by the Board of Trustees in August, 1993 and reaffirmed in October, 2003.
4. The Board of Trustees in September, 2004 adopted revised target funding assumptions. The target funding goal is based on a funding target of 115% over a 30 year time horizon using an 8% interest rate.
5. The 2004 actuarial valuation and the forecast valuations reflect the following legislation which was enacted since July 1, 2003. Legislation was enacted in the 2004 legislative session which:
  - Chapter 146 – (i) Extends the Group II 401(h) insurance subsidy to Group II employees who become members prior to July 1, 2005 and subsequently become disabled as the natural and proximate result of injuries suffered while in the performance of duty at any time in the future and (ii) Allows the Board of Trustees to recover the overpayment of benefits amounts which were paid after the death of a retiree or beneficiary or after the remarriage of a surviving spouse.
  - Chapter 216 - Allows certain political subdivision members of the system to purchase prior service credit where the member participated in a local retirement plan, allows any system member who was making additional contributions prior to December 31, 2004 or who applied

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\*Certain unfunded accrued liability charges are still assessed.

to make additional contributions prior to December 31, 2004 to continue to make additional contributions after December 31, 2004 and removes time frames for applications to purchase credit.

- Chapter 51 - Provides for the accrual of and payment of a creditable service for system members who enter qualifying military service as defined in federal law and become reemployed.

In addition, as provided for Chapter 191 of the Laws of 1993, a 1.0% COLA was granted to employees, teachers and policemen and a 2.5% COLA was granted to firemen who retired prior to July 1, 2003, effective July 1, 2004.

## SECTION II - EMPLOYEE DATA

The valuation results are based on employee data furnished by the Executive Director of the Retirement System as of June 30, 2003 adjusted to reflect legislation effective after July 1, 2003.

## SECTION III - ASSETS

1. The amount of assets taken into account in this valuation is based principally on information reported by the Retirement System Director of Finance as of June 30, 2004.
2. In accordance with RSA 100-A:16, the assets of the Retirement System are credited into three main funds. The Member Annuity Savings Fund is credited with all contributions made by members, together with interest thereon. The State Annuity Accumulation Fund is credited with the non-medical contributions made by the State and by the employing subdivisions, and is debited by all retirement allowances made to retired members and to beneficiaries of deceased members. Assets equal to the medical contributions made by the State and the employing subdivisions are transferred from the Medical Special Account to the State Annuity Accumulation Fund to make it whole. The 401(h) Subtrust Fund is credited with the medical contributions made by the State and by the employing subdivisions and is debited by the payment of postretirement medical premiums for



certain Group I and Group II retirees up to a prescribed maximum. Each of the three main funds is subdivided on account of the four member classifications.

3. For actuarial purposes the aggregate assets of the system are valued on the basis of a five-year moving market average valuation method. The operation of the method is outlined in Schedule E of the valuation report prepared as of June 30, 1976. Schedule C of this report shows the determination of actuarial value of assets as of June 30, 2004. It should be noted that once the five-year average is determined, as directed by the Board of Trustees, this value is compared with the book and market values of assets and the middle of these three values is used for funding purposes. However, the actuarial value of assets cannot be lower than the five-year average value.
4. As part of the valuation procedure, investment earnings for the past two years have been analyzed. Based on the procedures used and certain approximations, the total rate of return on the aggregate assets of the system has been determined as being 1.92% and 1.85% for the years ended June 30, 2003 and June 30, 2004, respectively, including realized and unrealized appreciation and depreciation to the extent recognized in the asset valuation method. The assumed annual long term rate of return was 9%. These results may be compared with the rate of return on market value which equaled 1.22% and 14.38% in the years ended June 30, 2003 and June 30, 2004, respectively.

#### SECTION IV - ACTUARIAL ASSUMPTIONS AND METHODS

1. The actuarial assumptions are the same as used in the previous valuation as of June 30, 2003. The methods are discussed briefly below. The actuarial assumptions are summarized in Schedule A.
2. The present actuarial funding method is the open group aggregate funding method as required under Chapter 55 of the Laws of 1992. This method develops a normal contribution rate for each membership classification based on present members and future new members. The assumptions for the future new entrants are the same as those used in the June 30, 2003 valuation. Under this method, actuarial gains and losses are spread over the future working lifetime of current active and future active members. It should be noted that for equity reasons, the remaining unfunded accrued liabilities as of June 30, 1991 continue to be charged to their respective sponsors so that the new

method will determine a contribution equal to the sum of a normal contribution and an accrued liability contribution until these accrued liabilities are fully funded.

3. The economic assumptions have been reviewed in the experience study completed as of June 30, 2001. The results of this study were presented to the Board of Trustees at a special meeting in June, 2002. The interest rate used remains equal to 9% per year and the salary increase assumption continues to anticipate an average annual salary increase of about 6%. These assumptions in combination are reasonable, although aggressive, and will continue to be closely monitored in comparison with developing experience.
4. For membership classifications that are not well funded the calculated normal rates may not be less than the rates determined using a target funding goal based on a funded ratio of 115% over a 30 year horizon using an 8% interest rate. This limitation is designed to help insure the future security of the system's benefit obligation.

#### SECTION V - COMMENTS ON THE INTERIM VALUATION

1. The results of the interim valuation as of June 30, 2004 are presented in Section I.
2. In accordance with Paragraph II(e) of RSA 100-A:16, an unfunded accrued liability was determined as of June 30, 1968 for each member classification. The amount of accrued liability contribution was then computed as the level amount required to discharge such unfunded liability over a 20-year period from June 30, 1968. Both the unfunded accrued liability and the accrued liability contribution have been adjusted from time to time since 1968 to reflect changes in the actuarial assumptions, as a result of special legislation authorizing additional transfers of members from one of the predecessor systems or between groups in the new system and to reflect certain improvements in the benefit provisions. In addition, new unfunded accrued liabilities are established as additional sponsors join the system and grant past service credit to their employees.
3. Table VIII in Section VII contains a breakdown of the unfunded accrued liability of the system as of June 30, 2005 and of the annual contributions required to amortize its different elements over the balance of 20-year periods (or other initial period) from their dates of establishment. The amounts of

unfunded accrued liability created in prior years have been adjusted to reflect the progress that has been made toward their funding.

4. Since the accrued liability contributions are fixed amounts and the members' contributions are fixed by the Statutes, the present value of future normal contributions payable by the State and employing subdivisions represents the balancing item on each valuation balance sheet. The Statutes provide for the State to pay 35% of the required future normal contributions and the remaining 65% to be paid by the employing subdivision. With regard to employee members, the employer, whether the State or a local subdivision, pays 100% of the required normal contribution for its employees.
5. Based on the results of the current valuation of the system, we have determined that the following rates of normal contribution would be appropriate as of June 30, 2004 to maintain the actuarial balance of the system:

TABLE I

MEMBERSHIP CLASSIFICATION	NORMAL CONTRIBUTION RATES <sup>ø</sup>		
	State's Portion	Employing Subdivision Portion	Total
Employees*	N/A	N/A	6.37%
Teachers	1.83%	3.41%	5.24
Policemen	4.62	8.58	13.20
Firemen	6.01	11.16	17.17

\*Normal rate applied to the respective payrolls of each employer.

<sup>ø</sup>Without regard to minimum normal contribution rates required by target funding.

SECTION VI - COMMENTS ON THE FORECAST VALUATIONS

1. The forecast valuations are prepared as an aid to the Trustees and the Executive Director in budgeting for the system costs over the ensuing biennium. The technique consists of estimating the system costs based on projected population for each year of the next biennium. These populations reflect realistic short-term assumptions as to future experience. These short-term projection assumptions are the same as in the June 30, 2003 valuation.
2. The following Table II shows the projected number and annual compensation of active members for the fiscal years ending June 30, 2006 and June 30, 2007 based on the projection assumptions.

TABLE II  
THE NUMBER AND ANNUAL EARNABLE COMPENSATION OF  
PROJECTED ACTIVE\* MEMBERS

MEMBERSHIP CLASSIFICATION	2005/2006		2006/2007	
	Number	Compensation	Number	Compensation
Employees	26,371	\$ 937,269,236	26,371	\$ 986,996,458
Teachers	18,710	882,257,131	18,710	912,015,487
Policemen	4,305	228,256,644	4,305	239,439,176
Firemen	1,524	91,269,912	1,524	95,626,196
Total	50,910	\$ 2,139,052,923	50,910	\$ 2,234,077,317

\*Inactive members are excluded from these statistics.

3. For projection purposes retired members were assumed to die in accordance with the postretirement mortality tables adopted by the Board. In addition, active members were brought onto the retired roll or terminated during the projection period in accordance with the active service tables adopted by the Board for valuation purposes.

5. Based on this rate of return and taking into account the expected annual cash flow within each membership classification the total projected adjusted asset values as of June 30, 2005 and June 30, 2006 are as follows:

TABLE III  
PROJECTED ADJUSTED ASSETS\* OF THE SYSTEM  
AS OF JUNE 30, 2005 AND JUNE 30, 2006

MEMBERSHIP CLASSIFICATION	TOTAL ADJUSTED ASSET VALUE	
	June 30, 2005	June 30, 2006
Employees	\$ 1,206,249,012	\$ 1,308,945,496
Teachers	1,565,442,737	1,670,031,722
Policemen	722,595,918	778,970,276
Firemen	351,327,695	376,703,303
Total	\$ 3,845,615,362	\$ 4,134,650,797

\*Excludes assets from the Special Account and the 401(h) Subtrust Fund assets.

6. Based on the results of the forecast valuations, the normal contribution rates necessary to maintain the actuarial balance of the system in fiscal 2005/2006 and 2006/2007 were calculated as shown on the following table:

TABLE IV

MEMBERSHIP CLASSIFICATION	NORMAL CONTRIBUTION RATE FOR FISCAL YEARS 2005/2006 AND 2006/2007 <sup>ø</sup>
Employees	6.37%
Teachers	5.24
Policemen	13.20
Firemen	17.17

<sup>ø</sup> Without regard to minimum normal contribution rate.

7. For membership classifications that are not well funded the Board has recommended that the minimum normal contribution rate not be less than the rates determined using target funding with a funding goal of 115% over a 30 year horizon and an 8% interest rate. The following table shows the funding level and target rate for each membership classification:

TABLE V

Membership Classification	Funded Ratio as of June 30, 2004*	Target Funding Rate <sup>ø</sup>
Employees	76.15%	6.81%
Teachers	82.19	5.70
Policemen	84.63	14.90
Firemen	72.11	22.09

<sup>ø</sup> Based on an 8% target funding discount rate.

\* Excludes postretirement medical assets and liabilities.

As can be seen in Table V, all the membership classifications are not considered to be well funded, therefore, the target funding rates should be used to determine future contribution levels since they are greater than the rates determined under the valuation funding method.

#### SECTION VII - APPROPRIATIONS

1. In the case of employees, the State contributes on the basis of the full rate for its employees and the employing subdivisions contribute on the basis of the full rate for their respective employees. With regard to the other membership classifications the State contributes on the basis of 35% of the indicated rates, while the employing subdivisions contribute on the basis of the remaining 65% of the indicated rates.
2. Applying the respective rates (after reflecting the minimum normal contribution rates) to the projected payrolls, the State's estimated normal contribution requirements for the next two years are as follows:

TABLE VI

MEMBERSHIP CLASSIFICATION	ESTIMATED STATE NORMAL CONTRIBUTION REQUIREMENTS FOR FISCAL:*	
	2005/2006	2006/2007
Employees	\$ 31,304,792	\$ 32,965,682
Teachers	17,645,143	18,240,310
Policemen	11,914,997	12,498,725
Firemen	7,055,164	7,391,905
Total	\$ 67,920,096	\$ 71,096,622

\*Actual contributions are determined as normal rates times monthly payrolls.

3. The following rates should be used to determine the normal contribution requirements based on compensation levels for fiscal years 2005/2006 and 2006/2007:

TABLE VII

MEMBERSHIP CLASSIFICATION	NORMAL CONTRIBUTION RATE FOR EMPLOYING SUBDIVISION	NORMAL CONTRIBUTION RATE FOR THE STATE
Employees	6.81%	6.81%
Teachers	3.70%	2.00%
Policemen	9.68%	5.22%
Firemen	14.36%	7.73%

4. In addition to the required normal contributions, certain employers, including the State, should continue to make annual payments towards the amortization of the unfunded accrued liabilities. For each new participating employer a separate determination will need to be made as of the date of participation assuming past service credit is granted. Table VIII shows the reconciliation of the unfunded accrued liabilities from June 30, 2004 to June 30, 2006. Table IX shows a breakdown of the unfunded accrued liabilities at June 30, 2005 and the required contributions necessary to fund these amounts.

TABLE VIII

RECONCILIATION OF UNFUNDED ACCRUED LIABILITIES FROM  
JUNE 30, 2004 TO JUNE 30, 2006

MEMBER- SHIP CLASSI- FICATION	ITEM	UNFUNDED ACCRUED LIABILITY AS OF JUNE 30, 2004	2004/2005 ACCRUED LIABILITY CONTRI- BUTIONø	UNFUNDED ACCRUED LIABILITY AS OF JUNE 30, 2005	2005/2006 ACCRUED LIABILITY CONTRI- BUTIONø	UNFUNDED ACCRUED LIABILITY AS OF JUNE 30, 2006
Employees	Amherst School District	\$ 2,071	\$ 2,160*	\$ 0	\$ 0	\$ 0
	Town of Raymond	21,500	2,667**	20,768	2,667**	19,970
	Subtotal	\$ 23,571	\$ 4,827	\$ 20,768	\$ 2,667	\$ 19,970
Teachers	Special legislation - 1983	56,619	56,619	0	0	0
Policemen	Special legislation - 1983	261,971	261,971	0	0	0
Firemen	Special legislation - 1983	140,360	140,360	0	0	0
Total		\$ 482,521	\$ 463,777	\$ 20,768	\$ 2,667	\$ 19,970

ø Payable at beginning of fiscal year unless otherwise noted.

\* Payable monthly.

\*\* Payable at end of fiscal year.

TABLE IX

UNFUNDED ACCRUED LIABILITIES AT  
JUNE 30, 2005 AND REQUIRED CONTRIBUTIONS

MEMBERSHIP CLASSIFICATION	ITEM	UNFUNDED ACCRUED LIABILITY AS OF JUNE 30, 2005	ANNUAL ACCRUED LIABILITY CONTRIBUTION	FISCAL YEAR IN WHICH FUNDING OF UNFUNDED ACCRUED LIABILITY WILL BE COMPLETED
Employees	Town of Raymond	\$ 20,768	2,667*	2019

\* Payable at end of fiscal year.



SECTION VIII - 401(h) SUBTRUST FUND FOR POSTRETIREMENT  
MEDICAL BENEFITS

1. RSA100-A:52 provides for the payment of a specified level of postretirement medical premiums for certain retired Group I and Group II members and beneficiaries. The monthly premium level for members younger than age 65 provided through the system for single coverage is limited to \$298.13 as of July 1, 2004 and increases each July 1 by 8%. The corresponding monthly premium for coverage for the spouse and the member is \$596.26 as of July 1, 2004. For members older than age 65, the monthly premium level for single coverage is limited to \$188.02 as of July 1, 2004 and increases each July 1 by 8%. The corresponding monthly premium for the member and spouse over age 65 is \$376.04 as of July 1, 2004.
2. Under Section 401(h) of the Internal Revenue Code qualified retirement plan trusts may pay for medical premiums due for retirees. These payments are funded through contributions of the employer which may not exceed 33-1/3% of the normal cost for the respective membership classification. For this reason we have separately analyzed the cost of the medical coverage provided in RSA100-A:52 and the results are shown in Table X.
3. The four portions of Table X present the results of the postretirement medical valuations for employees, teachers, policemen and firemen, respectively.
4. Under the financing terms of RSA100-A:53, a Medical Special Account in the amount of \$52.8 million was established as of July 1, 1988 for Group II, a Medical Special Account in the amount of \$89.1 million was established as of July 1, 1999 for teachers and a Medical Special Account in the amount of \$36.4 million was established as of January 1, 2002 for employees. Assets equal to the annual postretirement medical contributions are transferred to the State Annuity Accumulation Fund from the Medical Special Account. After the initial Medical Special Account has been adjusted for earnings and for transfers to the State Annuity Accumulation Fund, the remaining balances based on the actuarial value in the Medical Special Account as of June 30, 2004 are \$91,778,202, \$95,531,030, \$105,150,332 and \$54,230,095 for employees, teachers, policemen and firemen, respectively.

5. The 401(h) Subtrust Fund receives assets from the contributions from the State and the employing subdivisions. The annual premiums are paid from the 401(h) Subtrust Fund. The actual market value of the 401(h) Subtrust Fund as of June 30, 2004 as reported by the trustee was \$7,260,833, \$12,067,725, \$43,297,268 and \$29,296,427 for employees, teachers, policemen and firemen, respectively.

**TABLE X**  
**NEW HAMPSHIRE RETIREMENT SYSTEM - GROUP I EMPLOYEES**  
**RESULTS OF THE POSTRETIREMENT MEDICAL VALUATIONS**

	2004/2005	2005/2006	2006/2007
1. Projected liabilities			
(a) For active members	\$29,148,310	\$30,575,937	\$31,107,282
(b) For pensioners and beneficiaries	\$139,692,919	\$140,516,268	\$140,984,531
(c) Total	\$168,841,229	\$171,092,205	\$172,091,813
2. Projected assets (five-year moving market average)	\$7,182,275	\$13,140,536	\$19,747,921
3. Projected future normal cost [1.(c)-2.]	\$161,658,954	\$157,951,669	\$152,343,892
4. Projected normal contribution rate (without regard to limitations)	2.16 %	2.03 %	1.89 %
5. Normal contribution (without regard to limitations)	\$19,216,347	\$19,026,565	\$18,654,233
6. Allowable normal contribution	\$17,526,021	\$19,026,565	\$18,654,233
7. Accrued liability	\$168,841,229	\$171,092,205	\$172,091,813
8. Total earmarked assets (401(h) market value plus Medical Special Account as of beginning of year)	\$100,042,887	\$96,102,012	\$90,352,503
9. Funded ratio (8./7.)	59.3 %	56.2 %	52.5 %

**TABLE X**  
**NEW HAMPSHIRE RETIREMENT SYSTEM - GROUP I TEACHERS**  
**RESULTS OF THE POSTRETIREMENT MEDICAL VALUATIONS**

	2004/2005	2005/2006	2006/2007
1. Projected liabilities			
(a) For active members	\$74,479,346	\$80,007,222	\$84,799,810
(b) For pensioners and beneficiaries	\$182,951,039	\$185,791,971	\$188,266,729
(c) Total	\$257,430,385	\$265,799,193	\$273,066,539
2. Projected assets (five-year moving market average)	\$11,824,770	\$10,195,984	\$11,958,889
3. Projected future normal cost [1.(c)-2.]	\$245,605,615	\$255,603,209	\$261,107,650
4. Projected normal contribution rate (without regard to limitations)	3.66 %	3.72 %	3.70 %
5. Normal contribution (without regard to limitations)	\$31,266,195	\$32,819,965	\$33,744,573
6. Allowable normal contribution	\$11,532,613	\$16,762,885	\$17,328,294
7. Accrued liability	\$257,430,385	\$265,799,193	\$273,066,539
8. Total earmarked assets (401(h) market value plus Medical Special Account as of beginning of year)	\$109,561,564	\$104,622,178	\$97,383,592
9. Funded ratio (8./7.)	42.6 %	39.4 %	35.7 %

**TABLE X**  
**NEW HAMPSHIRE RETIREMENT SYSTEM - GROUP II POLICEMEN**  
**RESULTS OF THE POSTRETIREMENT MEDICAL VALUATIONS**

	2004/2005	2005/2006	2006/2007
1. Projected liabilities			
(a) For active members	\$199,862,999	\$217,252,565	\$235,692,635
(b) For pensioners and beneficiaries	\$93,504,318	\$95,221,899	\$96,774,726
(c) Total	\$293,367,317	\$312,474,464	\$332,467,361
2. Projected assets (five-year moving market average)	\$42,513,955	\$48,187,489	\$56,182,018
3. Projected future normal cost [1.(c)-2.]	\$250,853,362	\$264,286,975	\$276,285,343
4. Projected normal contribution rate (without regard to limitations)	13.54 %	13.79 %	13.92 %
5. Normal contribution (without regard to limitations)	\$29,432,853	\$31,476,591	\$33,329,933
6. Allowable normal contribution	\$8,782,033	\$11,344,355	\$11,900,127
7. Accrued liability	\$199,757,904	\$210,440,204	\$221,250,018
8. Total earmarked assets (401(h) market value plus Medical Special Account as of beginning of year)	\$150,384,977	\$156,623,714	\$162,590,044
9. Funded ratio (8./7.)	75.3 %	74.4 %	73.5 %

**TABLE X**  
**NEW HAMPSHIRE RETIREMENT SYSTEM - GROUP II FIREMEN**  
**RESULTS OF THE POSTRETIREMENT MEDICAL VALUATIONS**

	2004/2005	2005/2006	2006/2007
1. Projected liabilities			
(a) For active members	\$93,590,182	\$101,709,642	\$110,303,747
(b) For pensioners and beneficiaries	\$52,484,313	\$53,496,296	\$54,426,792
(c) Total	\$146,074,495	\$155,205,938	\$164,730,539
2. Projected assets (five-year moving market average)	\$30,175,678	\$35,215,815	\$41,038,362
3. Projected future normal cost [1.(c)-2.]	\$115,898,817	\$119,990,123	\$123,692,177
4. Projected normal contribution rate (without regard to limitations)	13.87 %	13.88 %	13.83 %
5. Normal contribution (without regard to limitations)	\$12,081,961	\$12,668,264	\$13,225,103
6. Allowable normal contribution	\$6,001,782	\$6,717,466	\$7,038,088
7. Accrued liability	\$105,906,816	\$111,423,168	\$117,007,320
8. Total earmarked assets (401(h) market value plus Medical Special Account as of beginning of year)	\$81,946,380	\$85,306,293	\$88,539,926
9. Funded ratio (8./7.)	77.4 %	76.6 %	75.7 %

SECTION IX - PLAN FUNDING STATUS AND PROGRESS

1. The system determines the annual required contribution using the open group aggregate funding method. This method does not identify or separately amortize unfunded actuarial liabilities. However, the Board of Trustees monitors the funding progress by reviewing the funded ratios of the system each June 30th. The funded ratio is determined by dividing the net assets held in trust for benefits by the liabilities of the system.
2. The relevant information which follows on Table XI is shown separately for each membership classification and in total for fiscal years ending June 30, 2004, June 30, 2005 and June 30, 2006. The actuarial present value of vested and nonvested accrued benefits is based on an interest rate of 9%.
3. The pension benefit obligation (PBO) for each retiree and beneficiary is the present value of benefits payable as of the measurement date. For active members, the PBO is determined by calculating the benefits for each probable cause of termination (withdrawal, death, disability, service retirement) on the basis of total service as of the measurement date and final average compensation at an expected future date of retirement. In the case of a benefit payable equal to the member's projected accumulated contributions, the accrued benefit is equal to the value of the accumulated contributions on the measurement date. The sum of the present values of these projected accrued benefits measures the PBO for each active member.
4. Assets are determined on the same basis as that used in the actuarial valuation. The Group I and Group II liabilities exclude the postretirement medical benefit liabilities.

**TABLE XI**  
**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**COMPARATIVE PENSION BENEFIT OBLIGATION**  
**EXCLUDING POST RETIREMENT MEDICAL INSURANCE SUBSIDY**

**Based on 9% Interest Assumption**  
**Employees**

	2004	2005	2006
A. Pension Benefit Obligation			
1. Retirees & Beneficiaries			
Currently Receiving Benefits			
& Term. Employees Not Yet Entitled	\$768,869,062	\$802,549,976	\$844,678,505
2. Current Employees			
a. Accumulated Employee Contributions			
With Interest	643,680,108	692,461,284	742,740,435
b. Employer Financed	<u>243,452,728</u>	<u>273,317,627</u>	<u>304,300,646</u>
3. Total Pension Benefit Obligation	\$1,656,001,898	\$1,768,328,887	\$1,891,719,586
FUNDING STATUS AT MARKET VALUE OF ASSETS			
B. Net Assets			
Market Value of Assets	\$1,329,831,279	\$1,434,618,528	\$1,557,868,269
Less: Undesignated Special Account	96,241,440	104,903,170	114,344,455
Less: Account for Medical Insurance Subsidy	<u>100,042,887</u>	<u>96,102,012</u>	<u>90,352,503</u>
Market Value of Assets Available for Benefits*	\$1,133,546,952	\$1,233,613,346	\$1,353,171,311
C. Unfunded Pension Benefit Obligation	\$522,454,946	\$534,715,541	\$538,548,275
Percent Funded	68.45%	69.76%	71.53%
Payroll	\$842,028,902	\$889,645,711	\$937,269,236
Unfunded / Payroll	62.05%	60.10%	57.46%
FUNDING STATUS AT ACTUARIAL VALUE OF ASSETS			
D. Net Assets			
Actuarial Value	\$1,216,559,401	\$1,311,152,182	\$1,423,289,951
Less: Special Account	<u>96,241,440</u>	<u>104,903,170</u>	<u>114,344,455</u>
Net Assets Available for Benefits*	\$1,120,317,961	\$1,206,249,012	\$1,308,945,496
E. Unfunded Pension Benefit Obligation	\$535,683,937	\$562,079,875	\$582,774,090
Percent Funded	67.65%	68.21%	69.19%
Payroll	\$842,028,902	\$889,645,711	\$937,269,236
Unfunded / Payroll	63.62%	63.18%	62.18%

\* Includes all receivable contributions.



**TABLE XI**  
**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**COMPARATIVE PENSION BENEFIT OBLIGATION**  
**EXCLUDING POST RETIREMENT MEDICAL INSURANCE SUBSIDY**

**Based on 9% Interest Assumption**  
**Teachers**

	2004	2005	2006
A. Pension Benefit Obligation			
1. Retirees & Beneficiaries			
Currently Receiving Benefits			
& Term. Employees Not Yet Entitled	\$847,433,324	\$921,374,913	\$1,008,726,682
2. Current Employees			
a. Accumulated Employee Contributions	823,533,965	873,189,753	918,802,571
b. Employer Financed	<u>301,660,340</u>	<u>309,316,976</u>	<u>312,099,539</u>
3. Total Pension Benefit Obligation	\$1,972,627,629	\$2,103,881,642	\$2,239,628,792
FUNDING STATUS AT MARKET VALUE OF ASSETS			
B. Net Assets			
Market Value of Assets	\$1,736,769,179	\$1,850,109,867	\$1,980,318,894
Less: Undesignated Special Account	119,071,116	129,787,516	141,468,392
Less: Account for Medical Insurance Subsidy	<u>109,561,564</u>	<u>104,622,178</u>	<u>97,383,592</u>
Market Value of Assets Available for Benefits*	\$1,508,136,499	\$1,615,700,173	\$1,741,466,910
C. Unfunded Pension Benefit Obligation	\$464,491,130	\$488,181,469	\$498,161,882
Percent Funded	76.45%	76.80%	77.76%
Payroll	\$826,821,630	\$854,267,624	\$882,257,131
Unfunded / Payroll	56.18%	57.15%	56.46%
FUNDING STATUS AT ACTUARIAL VALUE OF ASSETS			
D. Net Assets			
Actuarial Value	\$1,594,677,790	\$1,695,230,253	\$1,811,500,114
Less: Special Account	<u>119,071,116</u>	<u>129,787,516</u>	<u>141,468,392</u>
Net Assets Available for Benefits*	\$1,475,606,674	\$1,565,442,737	\$1,670,031,722
E. Unfunded Pension Benefit Obligation	\$497,020,955	\$538,438,905	\$569,597,070
Percent Funded	74.80%	74.41%	74.57%
Payroll	\$826,821,630	\$854,267,624	\$882,257,131
Unfunded / Payroll	60.11%	63.03%	64.56%

\* Includes all receivable contributions.

**TABLE XI**  
**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**COMPARATIVE PENSION BENEFIT OBLIGATION**  
**EXCLUDING POST RETIREMENT MEDICAL INSURANCE SUBSIDY**

**Based on 9% Interest Assumption**  
**Policemen**

	2004	2005	2006
A. Pension Benefit Obligation			
1. Retirees & Beneficiaries			
Currently Receiving Benefits			
& Term. Employees Not Yet Entitled	\$483,328,103	\$514,155,442	\$550,582,606
2. Current Employees			
a. Accumulated Employee Contributions			
With Interest	263,985,444	282,149,542	299,734,552
b. Employer Financed	<u>177,640,691</u>	<u>194,105,445</u>	<u>210,399,921</u>
3. Total Pension Benefit Obligation	\$924,954,238	\$990,410,429	\$1,060,717,079
FUNDING STATUS AT MARKET VALUE OF ASSETS			
B. Net Assets			
Market Value of Assets	\$882,615,783	\$948,364,516	\$1,025,058,048
Less: Undesignated Special Account	43,567,791	47,488,892	51,762,892
Less: Account for Medical Insurance Subsidy	<u>150,384,977</u>	<u>156,623,714</u>	<u>162,590,044</u>
Market Value of Assets Available for Benefits*	\$688,663,015	\$744,251,910	\$810,705,112
C. Unfunded Pension Benefit Obligation	\$236,291,223	\$246,158,519	\$250,011,967
Percent Funded	74.45%	75.15%	76.43%
Payroll	\$206,651,567	\$217,377,056	\$228,256,644
Unfunded / Payroll	114.34%	113.24%	109.53%
FUNDING STATUS AT ACTUARIAL VALUE OF ASSETS			
D. Net Assets			
Actuarial Value	\$719,056,420	\$770,084,810	\$830,733,168
Less: Special Account	<u>43,567,791</u>	<u>47,488,892</u>	<u>51,762,892</u>
Net Assets Available for Benefits*	\$675,488,629	\$722,595,918	\$778,970,276
E. Unfunded Pension Benefit Obligation	\$249,465,609	\$267,814,511	\$281,746,803
Percent Funded	73.03%	72.96%	73.44%
Payroll	\$206,651,567	\$217,377,056	\$228,256,644
Unfunded / Payroll	120.72%	123.20%	123.43%

\* Includes all receivable contributions.

**TABLE XI**  
**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**COMPARATIVE PENSION BENEFIT OBLIGATION**  
**EXCLUDING POST RETIREMENT MEDICAL INSURANCE SUBSIDY**

**Based on 9% Interest Assumption**  
**Firemen**

	2004	2005	2006
A. Pension Benefit Obligation			
1. Retirees & Beneficiaries			
Currently Receiving Benefits			
& Term. Employees Not Yet Entitled	\$268,874,166	\$284,763,104	\$302,336,154
2. Current Employees			
a. Accumulated Employee Contributions			
With Interest	133,075,913	141,520,378	150,002,809
b. Employer Financed Vested	<u>99,144,632</u>	<u>105,588,732</u>	<u>112,137,328</u>
3. Total Pension Benefit Obligation	\$501,094,711	\$531,872,214	\$564,476,291
FUNDING STATUS AT MARKET VALUE OF ASSETS			
B. Net Assets			
Market Value of Assets	\$442,069,956	\$474,680,579	\$511,157,947
Less: Undesignated Special Account	41,954,962	45,730,909	49,846,691
Less: Account for Medical Insurance Subsidy	<u>81,946,380</u>	<u>85,306,293</u>	<u>88,539,926</u>
Market Value of Assets Available for Benefits*	\$318,168,614	\$343,643,377	\$372,771,330
C. Unfunded Pension Benefit Obligation	\$182,926,097	\$188,228,837	\$191,704,961
Percent Funded	63.49%	64.61%	66.04%
Payroll	\$83,083,449	\$87,108,588	\$91,269,912
Unfunded / Payroll	220.17%	216.09%	210.04%
FUNDING STATUS AT ACTUARIAL VALUE OF ASSETS			
D. Net Assets			
Actuarial Value	\$370,857,135	\$397,058,604	\$426,549,994
Less: Special Account	<u>41,954,962</u>	<u>45,730,909</u>	<u>49,846,691</u>
Net Assets Available for Benefits*	\$328,902,173	\$351,327,695	\$376,703,303
E. Unfunded Pension Benefit Obligation	\$172,192,538	\$180,544,519	\$187,772,988
Percent Funded	65.64%	66.05%	66.74%
Payroll	\$83,083,449	\$87,108,588	\$91,269,912
Unfunded / Payroll	207.25%	207.26%	205.73%

\*Includes all receivable contributions.

**TABLE XI**  
**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**COMPARATIVE PENSION BENEFIT OBLIGATION**  
**EXCLUDING POST RETIREMENT MEDICAL INSURANCE SUBSIDY**

**Based on 9% Interest Assumption**  
**Total**

	2004	2005	2006
A. Pension Benefit Obligation			
1. Retirees & Beneficiaries			
Currently Receiving Benefits			
& Term. Employees Not Yet Entitled	\$2,368,504,655	\$2,522,843,435	\$2,706,323,947
2. Current Employees			
a. Accumulated Employee Contributions			
With Interest	1,864,275,430	1,989,320,957	2,111,280,367
b. Employer Financed Vested	<u>821,898,391</u>	<u>882,328,780</u>	<u>938,937,434</u>
3. Total Pension Benefit Obligation	\$5,054,678,476	\$5,394,493,172	\$5,756,541,748
FUNDING STATUS AT MARKET VALUE OF ASSETS			
B. Net Assets			
Market Value of Assets	\$4,391,286,197	\$4,707,773,490	\$5,074,403,158
Less: Undesignated Special Account	300,835,309	327,910,487	357,422,430
Less: Account for Medical Insurance Subsidy	<u>441,935,808</u>	<u>442,654,197</u>	<u>438,866,065</u>
Market Value of Assets Available for Benefits*	\$3,648,515,080	\$3,937,208,806	\$4,278,114,663
C. Unfunded Pension Benefit Obligation	\$1,406,163,396	\$1,457,284,366	\$1,478,427,085
Percent Funded	72.18%	72.99%	74.32%
Payroll	\$1,958,585,548	\$2,048,398,979	\$2,139,052,923
Unfunded / Payroll	71.79%	71.14%	69.12%
FUNDING STATUS AT ACTUARIAL VALUE OF ASSETS			
D. Net Assets			
Actuarial Value	\$3,901,150,746	\$4,173,525,849	\$4,492,073,227
Less: Special Account	<u>300,835,309</u>	<u>327,910,487</u>	<u>357,422,430</u>
Net Assets Available for Benefits*	\$3,600,315,437	\$3,845,615,362	\$4,134,650,797
E. Unfunded Pension Benefit Obligation	\$1,454,363,039	\$1,548,877,810	\$1,621,890,951
Percent Funded	71.23%	71.29%	71.83%
Payroll	\$1,958,585,548	\$2,048,398,979	\$2,139,052,923
Unfunded / Payroll	74.26%	75.61%	75.82%

\*Includes all receivable contributions.

5. The following table presents historical trend information (in millions of dollars) for fiscal years 1987 through 2004 for the system as a whole. Estimated results are shown for the three years following. Results for fiscal years ending 1990 and prior are based on an 8% interest assumption and results for fiscal years ending 1991 and later are based on a 9% interest assumption.

TABLE XII  
TOTAL OF GROUPS

Fiscal Year Ending	Net Assets Available For Benefits	Pension Benefit Obligation	Percentage Funded	Unfunded Pension Benefit Obligation	Annual Covered Payroll	Unfunded Pension Benefit Obligation As A Percentage of Covered Payroll
1987	\$ 792.6	\$ 798.3	99.3%	\$ 5.7	\$ 638.7	.9%
1988	\$ 866.7	\$ 870.7	99.5%	\$ 4.0	\$ 695.7	.6%
1989	\$ 1,114.6	\$ 1,332.1	83.7%	\$ 217.5	\$ 883.3	24.6%
1990	\$ 1,245.7	\$ 1,471.9	84.6%	\$ 226.1	\$ 962.4	23.5%
1991	\$ 1,348.7	\$ 1,482.2	91.0%	\$ 133.5	\$ 1,020.6	13.1%
1992	\$ 1,517.2	\$ 1,600.5	94.8%	\$ 83.3	\$ 1,040.4	8.0%
1993	\$ 1,674.3	\$ 1,797.3	93.2%	\$ 123.0	\$ 1,111.1	11.1%
1994	\$ 1,830.9	\$ 1,954.2	93.7%	\$ 123.3	\$ 1,161.0	10.6%
1995	\$ 2,004.7	\$ 2,225.0	90.1%	\$ 220.3	\$ 1,207.5	18.2%
1996	\$ 2,172.4	\$ 2,418.9	89.8%	\$ 246.5	\$ 1,227.8	20.0%
1997	\$ 2,387.2	\$ 2,677.0	89.2%	\$ 289.8	\$ 1,267.3	22.9%
1998	\$ 2,607.9	\$ 2,924.7	89.2%	\$ 316.8	\$ 1,294.7	24.5%
1999	\$ 2,886.5	\$ 3,229.2	89.4%	\$ 342.7	\$ 1,393.6	24.6%
2000	\$ 3,109.7	\$ 3,460.3	89.9%	\$ 355.1	\$ 1,459.7	24.0%
2001	\$ 3,336.7	\$ 3,909.6	85.4%	\$ 572.9	\$ 1,615.9	35.5%
2002	\$ 3,571.1	\$ 4,192.0	85.2%	\$ 620.9	\$ 1,700.2	36.5%
2003	\$ 3,538.8	\$ 4,709.9	75.1%	\$ 1,171.1	\$ 1,872.9	62.5%
2004	\$ 3,600.3	\$ 5,054.7	71.2%	\$ 1,454.4	\$ 1,958.6	74.3%
2005*	\$ 3,845.6	\$ 5,394.5	71.3%	\$ 1,548.9	\$ 2,048.4	75.6%
2006*	\$ 4,134.7	\$ 5,756.5	71.8%	\$ 1,621.8	\$ 2,139.1	75.8%

\*Projected estimates.

6. In the past, the auditors for the State and the system have sought information on the actuarial present value of accrued benefits as determined under Statement No. 35 of the Financial Accounting Standards Board. We have determined these values based on the current valuation and the forecast valuations. The actuarial value of vested and nonvested accrued benefits was based on an interest rate of 9%.
7. The following tables present these results separately for each membership classification and in total for fiscal years ending June 30, 2004, June 30, 2005 and June 30, 2006. Results are shown both including and excluding postretirement medical liabilities and assets.

**TABLE XIII**  
**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**COMPARATIVE ACCUMULATED PLAN BENEFIT INFORMATION**

**Based on 9% Interest Assumption**  
**Employees**

	2004	2005	2006
Vested Benefits			
Participants Currently Receiving Payments	\$757,638,887	\$790,673,522	\$832,246,616
Other Participants	<u>717,494,820</u>	<u>778,739,363</u>	<u>840,974,006</u>
Total Vested	\$1,475,133,707	\$1,569,412,885	\$1,673,220,622
Nonvested Benefits	<u>13,445,097</u>	<u>15,687,332</u>	<u>17,761,433</u>
Total Pension Liabilities	\$1,488,578,804	\$1,585,100,217	\$1,690,982,055
Market Value of Assets	\$1,329,831,279	\$1,434,618,528	\$1,557,868,269
Less: Undesignated Special Account	96,241,440	104,903,170	114,344,455
Less: Account for Medical Insurance Subsidy	<u>100,042,887</u>	<u>96,102,012</u>	<u>90,352,503</u>
Market Value of Assets Available for Benefits*	\$1,133,546,952	\$1,233,613,346	\$1,353,171,311
Funded Ratio for Pension Liability	76.15%	77.83%	80.02%
Actuarial Present Value of Post Retirement Medical Liabilities			
Active	\$29,148,310	\$30,575,937	\$31,107,282
Retired	<u>139,692,919</u>	<u>140,516,268</u>	<u>140,984,531</u>
Total Actuarial Present Value of Post Retirement Medical Liabilities	\$168,841,229	\$171,092,205	\$172,091,813
Total Actuarial Present Value of Accrued Benefits	\$1,657,420,033	\$1,756,192,422	\$1,863,073,868
Market Value of Assets Available for Benefits*	\$1,233,589,839	\$1,329,715,358	\$1,443,523,814
Overall Funded Ratio	74.43%	75.72%	77.48%

\* Includes all receivable contributions.

**TABLE XIII**  
**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**COMPARATIVE ACCUMULATED PLAN BENEFIT INFORMATION**

**Based on 9% Interest Assumption**  
**Teachers**

	2004	2005	2006
Vested Benefits			
Participants Currently Receiving Payments	\$835,510,986	\$908,780,058	\$995,504,296
Other Participants	<u>992,732,184</u>	<u>1,058,464,520</u>	<u>1,108,905,727</u>
Total Vested	\$1,828,243,170	\$1,967,244,578	\$2,104,410,023
Nonvested Benefits	<u>6,639,787</u>	<u>6,975,329</u>	<u>6,824,844</u>
Total Pension Liabilities	\$1,834,882,957	\$1,974,219,907	\$2,111,234,867
Market Value of Assets	\$1,736,769,179	\$1,850,109,867	\$1,980,318,894
Less: Undesignated Special Account	119,071,116	129,787,516	141,468,392
Less: Account for Medical Insurance Subsidy	<u>109,561,564</u>	<u>104,622,178</u>	<u>97,383,592</u>
Market Value of Assets Available for Benefits*	\$1,508,136,499	\$1,615,700,173	\$1,741,466,910
Funded Ratio for Pension Liability	82.19%	81.84%	82.49%
Actuarial Present Value of Post Retirement Medical Liabilities			
Active	\$74,479,346	\$80,007,222	\$84,799,810
Retired	<u>182,951,039</u>	<u>185,791,971</u>	<u>188,266,729</u>
Total Actuarial Present Value of Post Retirement Medical Liabilities	\$257,430,385	\$265,799,193	\$273,066,539
Total Actuarial Present Value of Accrued Benefits	\$2,092,313,342	\$2,240,019,100	\$2,384,301,406
Market Value of Assets Available for Benefits*	\$1,617,698,063	\$1,720,322,351	\$1,838,850,502
Overall Funded Ratio	77.32%	76.80%	77.12%

\* Includes all receivable contributions.



**TABLE XIII**  
**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**COMPARATIVE ACCUMULATED PLAN BENEFIT INFORMATION**

**Based on 9% Interest Assumption**  
**Policemen**

	2004	2005	2006
Vested Benefits			
Participants Currently Receiving Payments	\$482,920,454	\$513,717,932	\$550,112,425
Other Participants	<u>311,849,397</u>	<u>337,241,055</u>	<u>361,221,838</u>
Total Vested	\$794,769,851	\$850,958,987	\$911,334,263
Nonvested Benefits	<u>18,978,557</u>	<u>20,747,098</u>	<u>22,163,049</u>
Total Pension Liabilities	\$813,748,408	\$871,706,085	\$933,497,312
Market Value of Assets	\$882,615,783	\$948,364,516	\$1,025,058,048
Less: Undesignated Special Account	43,567,791	47,488,892	51,762,892
Less: Account for Medical Insurance Subsidy	<u>150,384,977</u>	<u>156,623,714</u>	<u>162,590,044</u>
Market Value of Assets Available for Benefits*	\$688,663,015	\$744,251,910	\$810,705,112
Funded Ratio for Pension Liability	84.63%	85.38%	86.85%
Actuarial Present Value of Post Retirement Medical Liabilities			
Active	\$106,253,586	\$115,218,305	\$124,475,292
Retired	<u>93,504,318</u>	<u>95,221,899</u>	<u>96,774,726</u>
Total Actuarial Present Value of Post Retirement Medical Liabilities	\$199,757,904	\$210,440,204	\$221,250,018
Total Actuarial Present Value of Accrued Benefits	\$1,013,506,312	\$1,082,146,289	\$1,154,747,330
Market Value of Assets Available for Benefits*	\$839,047,992	\$900,875,624	\$973,295,156
Overall Funded Ratio	82.79%	83.25%	84.29%

\* Includes all receivable contributions.

**TABLE XIII**  
**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**COMPARATIVE ACCUMULATED PLAN BENEFIT INFORMATION**

**Based on 9% Interest Assumption**  
**Firemen**

	2004	2005	2006
Vested Benefits			
Participants Currently Receiving Payments	\$268,801,459	\$284,683,853	\$302,249,770
Other Participants	<u>164,408,381</u>	<u>176,217,905</u>	<u>187,321,252</u>
Total Vested	\$433,209,840	\$460,901,758	\$489,571,022
Nonvested Benefits	<u>7,989,046</u>	<u>8,632,321</u>	<u>9,136,798</u>
Total Pension Liabilities	\$441,198,886	\$469,534,079	\$498,707,820
Market Value of Assets	\$442,069,956	\$474,680,579	\$511,157,947
Less: Undesignated Special Account	41,954,962	45,730,909	49,846,691
Less: Account for Medical Insurance Subsidy	<u>81,946,380</u>	<u>85,306,293</u>	<u>88,539,926</u>
Market Value of Assets Available for Benefits*	\$318,168,614	\$343,643,377	\$372,771,330
Funded Ratio for Pension Liability	72.11%	73.19%	74.75%
Actuarial Present Value of Post Retirement Medical Liabilities			
Active	\$53,422,503	\$57,926,872	\$62,580,528
Retired	<u>52,484,313</u>	<u>53,496,296</u>	<u>54,426,792</u>
Total Actuarial Present Value of Post Retirement Medical Liabilities	\$105,906,816	\$111,423,168	\$117,007,320
Total Actuarial Present Value of Accrued Benefits	\$547,105,702	\$580,957,247	\$615,715,140
Market Value of Assets Available for Benefits*	\$400,114,994	\$428,949,670	\$461,311,256
Overall Funded Ratio	73.13%	73.83%	74.92%

\* Includes all receivable contributions.

**TABLE XIII**  
**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**COMPARATIVE ACCUMULATED PLAN BENEFIT INFORMATION**

**Based on 9% Interest Assumption**  
**Total**

	2004	2005	2006
Vested Benefits			
Participants Currently Receiving Payments	\$2,344,871,786	\$2,497,855,365	\$2,680,113,107
Other Participants	<u>2,186,484,782</u>	<u>2,350,662,843</u>	<u>2,498,422,823</u>
Total Vested	\$4,531,356,568	\$4,848,518,208	\$5,178,535,930
Nonvested Benefits	<u>47,052,487</u>	<u>52,042,080</u>	<u>55,886,124</u>
Total Pension Liabilities	\$4,578,409,055	\$4,900,560,288	\$5,234,422,054
Market Value of Assets	\$4,391,286,197	\$4,707,773,490	\$5,074,403,158
Less: Undesignated Special Account	300,835,309	327,910,487	357,422,430
Less: Account for Medical Insurance Subsidy	<u>441,935,808</u>	<u>442,654,197</u>	<u>438,866,065</u>
Market Value of Assets Available for Benefits*	\$3,648,515,080	\$3,937,208,806	\$4,278,114,663
Funded Ratio for Pension Liability	79.69%	80.34%	81.73%
Actuarial Present Value of Post Retirement Medical Liabilities			
Active	\$263,303,745	\$283,728,336	\$302,962,912
Retired	<u>468,632,589</u>	<u>475,026,434</u>	<u>480,452,778</u>
Total Actuarial Present Value of Post Retirement Medical Liabilities	\$731,936,334	\$758,754,770	\$783,415,690
Total Actuarial Present Value of Accrued Benefits	\$5,310,345,389	\$5,659,315,058	\$6,017,837,744
Market Value of Assets Available for Benefits*	\$4,090,450,888	\$4,379,863,003	\$4,716,980,728
Overall Funded Ratio	77.03%	77.39%	78.38%

\*Includes all receivable contributions.

**SCHEDULE A**

**OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS**

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS  
GROUP I - EMPLOYEES

INTEREST RATE: 9% per annum, compounded annually.  
9% per annum, compounded annually on employee contributions.  
(includes a 3.0% inflation component)

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal and vesting, death, disability, early retirement and normal retirement are as follows:

<u>Age</u>	<u>Annual Rate of</u> <u>Withdrawal and</u> <u>Vesting</u> <sup>ø</sup>		<u>Annual Rate of</u> <u>Death</u> *		<u>Annual Rate of</u> <u>Disability</u> **	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
25	10.00%	11.00%	.06%	.02%	.03%	.02%
30	9.00	9.00	.06	.02	.03	.05
35	7.00	7.00	.06	.02	.04	.10
40	5.00	6.00	.06	.03	.10	.10
45	5.00	5.00	.10	.04	.20	.15
50	5.00	5.00	.15	.05	.30	.20
55	5.00	4.00	.20	.25	.35	.20
59	5.00	4.00	.28	.33	.35	.24

<u>Age</u>	<u>Annual Rate of</u> <u>Early Retirement</u> #		<u>Annual Rate of</u> <u>Normal Retirement</u> #	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
55	3.50%	4.00%		
58	6.20	7.60		
61			13.00%	12.00%
64			22.00	18.00
67			25.00	20.00
70			100.00	100.00

ø Withdrawal rates for the first two years of employment are multiplied by 2.0.

\* 98% are assumed to be ordinary death and 2% are assumed to be accidental death.

\*\* 50% are assumed to be ordinary disability and 50% are assumed to be accidental disability.

# Early retirement and normal retirement prior to June 30, 2004 are multiplied by 2.0 for State employees.

SALARY INCREASES: Representative values of the assumed rates of future salary increases are as follows:

<u>Age</u>	<u>Annual Rate of</u> <u>Salary Increases</u>
25	13.75%
30	9.25
35	8.25
40	6.85
45	6.65
50	6.45
55	6.25
60	6.05
64	5.89

**DEATHS AFTER RETIREMENT:** According to the 1995 Buck Mortality Table set forward 1 year for men and women. A special mortality table was used for the period after disability retirement.

**VALUATION METHOD:** Open group aggregate. Gains and losses are spread over the average future careers of both current and future active members. If not well funded, the minimum normal contribution rate shall not be less than the rate determined using the target funding method with a funding goal of 115% over a 30 year horizon and an 8% interest rate.

**ASSET VALUATION METHOD:** Five-year moving average of market values based on unit values. Under this method an artificial unit value is established as a starting point, and based on that value the starting number of units is determined. The increase in the number of units is determined by converting the net cash flow, excluding realized and unrealized gains and losses, into additional units based on the unit value at the beginning of the measurement period. At the end of the measurement period the number of units is divided into the market value of the fund to determine the new unit value. The average unit value over the past five years is multiplied by the number of units available at the valuation date to determine the value of assets at the valuation date. The actual value of assets used in the valuation is the middle value among book, market and the five-year average value, however, it cannot be lower than the five-year average value.

**PERCENTAGE MARRIED:** 80% of active members are assumed to be married and eligible for spouse's benefit with the husband assumed to be three years older than the wife. Of the married members 80% are assumed to elect spousal coverage for postretirement coverage.

**SEVERANCE PAY:** The valuation recognizes 100% of the effect of severance pay.

**EXPENSES:** None.

**PROJECTION ASSUMPTIONS:** The following additional assumptions were used in projecting the workforce. All other assumptions for projection purposes were identical to the valuation assumptions outlined above.

Workforce Size: Constant

New Entrant Distribution: The new entrants are assumed to be 35% male and 65% female distributed by age as follows:

<u>Male</u>			<u>Female</u>		
<u>Age</u>	<u>Percent</u>	<u>2003 Compen- sation Level*</u>	<u>Percent</u>	<u>2003 Compen- sation Level*</u>	
20	5.0%	\$ 20,000	5.0%	\$ 16,000	
25	10.0	22,000	10.0	20,000	
30	10.0	27,000	10.0	21,000	
35	15.0	28,000	10.0	21,000	
40	15.0	29,000	15.0	22,000	
45	15.0	29,000	20.0	22,000	
50	15.0	30,000	15.0	24,000	
55	10.0	31,000	10.0	24,000	
60	5.0	31,000	5.0	24,000	

\*Increases at 5.0% per annum.

**Investments:** The total realized rate of return on adjusted assets was 9% per annum during the projection period.

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS  
GROUP I - TEACHERS

INTEREST RATE: 9% per annum, compounded annually.  
9% per annum, compounded annually on employee contributions.  
(includes a 3.0% inflation component)

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal and vesting, death, disability, early retirement and normal retirement are as follows:

<u>Age</u>	<u>Annual Rate of</u>					
	<u>Withdrawal and Vesting<sup>ø</sup></u>		<u>Death*</u>		<u>Disability**</u>	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
25	5.00%	5.00%	.06%	.03%	.01%	.01%
30	5.00	5.00	.06	.03	.01	.01
35	4.00	5.00	.06	.03	.01	.01
40	3.00	3.00	.06	.05	.01	.01
45	3.00	2.00	.06	.05	.02	.02
50	4.00	4.00	.12	.10	.05	.05
55	5.00	4.00	.18	.15	.20	.10
59	6.00	5.00	.18	.15	.20	.01

<u>Age</u>	<u>Annual Rate of</u>			
	<u>Early Retirement</u>		<u>Normal Retirement</u>	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
55	5.00%	5.00%		
58	11.00	14.00		
61			17.00%	22.00%
64			23.00	28.00
67			26.00	32.00
70			100.00	100.00

ø Withdrawal rates for first year of employment are multiplied by 3.0 and for second year of employment are multiplied by 2.0. In addition, we assumed for postretirement medical coverage that 80% of the deferred vested terminations will elect to receive a return of member contributions in lieu of an allowance.

\* 98% are assumed to be ordinary death and 2% are assumed to be accidental death.

\*\* 92% are assumed to be ordinary disability and 8% are assumed to be accidental disability.

**SALARY INCREASES:** Representative values of the assumed rates of future salary increases are as follows:

<u>Age</u>	<u>Annual Rate of Salary Increases</u>
25	8.50%
30	6.50
35	5.75
40	5.00
45	4.25
50	4.00
55	3.75
60	3.50
64	3.50

**DEATHS AFTER RETIREMENT:** According to the 1995 Buck Mortality Table set back 1 year for men and women. A special mortality table was used for the period after disability retirement.

**VALUATION METHOD:** Open group aggregate. Gains and losses are spread over the average future careers of both current and future active members. If not well funded, the minimum normal contribution rate shall not be less than the rate determined using the target funding method with a funding goal of 115% over a 30 year horizon and an 8% interest rate.

**ASSET VALUATION METHOD:** Five-year moving average of market values based on unit values. Under this method an artificial unit value is established as a starting point, and based on that value the starting number of units is determined. The increase in the number of units is determined by converting the net cash flow, excluding realized and unrealized gains and losses, into additional units based on the unit value at the beginning of the measurement period. At the end of the measurement period the number of units is divided into the market value of the fund to determine the new unit value. The average unit value over the past five years is multiplied by the number of units available at the valuation date to determine the value of assets at the valuation date. The actual value of assets used in the valuation is the middle value among book, market and the five-year average value, however, it cannot be lower than the five-year average value.

**PERCENTAGE MARRIED:** 80% of active members are assumed to be married and eligible for spouse's benefit with the husband assumed to be three years older than the wife. Of the married members 80% are assumed to elect spousal coverage for postretirement coverage.

**SEVERANCE PAY:** The valuation recognizes 100% of the effect of severance pay.

**EXPENSES:** None.



**PROJECTION ASSUMPTIONS:** The following additional assumptions were used in projecting the workforce. All other assumptions for projection purposes were identical to the valuation assumptions outlined above.

Workforce Size: Constant.

New Entrant Distribution: The new entrants are assumed to be 25% male and 75% female distributed by age as follows:

Age	Percent	Male		Percent	Female	
			2003 Compen- sation Level*			2003 Compen- sation Level*
25	25.0%	\$	32,000	35.0%	\$	31,000
30	20.0		34,000	15.0		33,000
35	15.0		35,000	10.0		34,000
40	15.0		39,000	10.0		35,000
45	10.0		42,000	15.0		36,000
50	10.0		42,000	10.0		36,000
55	5.0		42,000	5.0		38,000

\*Increases at 5.0% per annum.

Investments: The total realized rate of return on adjusted assets was 9% per annum during the projection period.

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS  
GROUP II - POLICEMEN

INTEREST RATE: 9% per annum, compounded annually.  
9% per annum, compounded annually on employee contributions.  
(includes a 3.0% inflation component)

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal, vesting, death, disability, and retirement are as follows:

Age	Withdrawal and Vesting	Annual Rate of				Disability
		Death				
		Ordinary	Accidental	Ordinary	Accidental	
						Retirement
25	6.00%	.05%	.01%	.01%	.01%	
30	5.00	.06	.01	.02	.01	
35	4.00	.07	.01	.02	.15	
40	3.00	.10	.01	.06	.20	
45	3.00	.14	.01	.24	.25	20.00%
50	3.00	.16	.01	.20	.30	22.08
55	2.00	.24	.01	.36	.35	24.17
60	2.00	.30	.01	1.38	.40	26.25
64		.40	.01	2.19	.40	27.92
67						29.17
70						100.00

SALARY INCREASES: Representative values of the assumed rates of future salary increases are as follows:

<u>Age</u>	<u>Annual Rate of Salary Increases</u>
25	13.25%
30	8.75
35	7.50
40	6.25
45	6.25
50	6.25
55	6.25
60	6.25
64	6.25

DEATHS AFTER RETIREMENT: According to the 1995 George B. Buck Mortality Table set forward 1 year for men and women. A special mortality table was used for the period after disability retirement.

NORMAL RETIREMENT: Age 45 with 20 years of service or age 60 if earlier.

VALUATION METHOD: Open group aggregate. Gains and losses are spread over the average future careers of both current and future active members. If not well funded, the minimum normal contribution rate

shall not be less than the rate determined using the target funding method with a funding goal of 115% over a 30 year horizon and an 8% interest rate.

**ASSET VALUATION METHOD:** Five-year moving average of market values based on unit values. Under this method an artificial unit value is established as a starting point, and based on that value the starting number of units is determined. The increase in the number of units is determined by converting the net cash flow, excluding realized and unrealized gains and losses, into additional units based on the unit value at the beginning of the measurement period. At the end of the measurement period the number of units is divided into the market value of the fund to determine the new unit value. The average unit value over the past five years is multiplied by the number of units available at the valuation date to determine the value of assets at the valuation date. The actual value of assets used in the valuation is the middle value among book, market and the five-year average value, however, it cannot be lower than the five-year average value.

**PERCENTAGE MARRIED:** 50% of active members are assumed to be married and eligible for spouse's benefit with the husband assumed to be three years older than the wife. 40% of active members are assumed to be married and elect spousal coverage for postretirement medical benefits.

**SEVERANCE PAY:** The valuation recognizes 100% of the effect of severance pay.

**EXPENSES:** None.

**PROJECTION ASSUMPTIONS:** The following additional assumptions were used in projecting the workforce. All other assumptions for projection purposes were identical to the valuation assumptions outlined above.

Workforce Size: Constant.

New Entrant Distribution: The new entrants are assumed to be all males distributed by age as follows:

<u>Age</u>	<u>Percent</u>	<u>2003 Compensation Level*</u>
20	5.0%	\$ 28,000
25	35.0	33,000
30	20.0	33,000
35	15.0	33,000
40	10.0	33,000
45	5.0	35,000
50	5.0	36,000
55	5.0	36,000

\*Increases at 5.0% per annum.

**Investments:** The total realized rate of return on adjusted assets was 9% per annum during the projection period.

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS  
GROUP II - FIREMEN

INTEREST RATE: 9% per annum, compounded annually.  
9% per annum, compounded annually on employee contributions.  
(includes a 3.0% inflation component)

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal and vesting, death, disability, and retirement are as follows:

<u>Age</u>	<u>Withdrawal and Vesting</u>	<u>Annual Rate of</u> <u>Death</u>		<u>Disability</u>		<u>Retirement</u>
		<u>Ordinary</u>	<u>Accidental</u>	<u>Ordinary</u>	<u>Accidental</u>	
25	1.00%	.04%	.02%	.02%	.05%	
30	1.00	.04	.02	.02	.07	
35	1.00	.05	.02	.02	.09	
40	1.00	.07	.02	.02	.20	
45	1.00	.10	.02	.02	.25	15.00%
50	1.00	.11	.02	.02	.30	15.00
55	1.00	.17	.02	.02	.35	25.00
60		.21	.02	.02	.40	30.00
64		.28	.02	.02	.40	26.00
67						25.00
70						100.00

SALARY INCREASES: Representative values of the assumed rates of future salary increases are as follows:

<u>Age</u>	<u>Annual Rate of Salary Increases</u>
25	8.37%
30	7.54
35	6.71
40	6.25
45	6.25
50	6.25
55	6.25
60	6.25
64	6.25

DEATHS AFTER RETIREMENT: According to the 1989 George B. Buck Mortality Table setback 3 years for males. A special mortality table was used for the period after disability retirement.

NORMAL RETIREMENT: Age 45 with 20 years of service or age 60 if earlier.

**VALUATION METHOD:** Open group aggregate. Gains and losses are spread over the average future careers of both current and future active members. If not well funded, the minimum normal contribution rate shall not be less than the rate determined using the target funding method with a funding goal of 115% over a 30 year horizon and an 8% interest rate.

**ASSET VALUATION METHOD:** Five-moving average of market values based on unit values. Under this method an artificial unit value is established as a starting point, and based on that value the starting number of units is determined. The increase in the number of units is determined by converting the net cash flow, excluding realized and unrealized gains and losses, into additional units based on the unit value at the beginning of the measurement period. At the end of the measurement period the number of units is divided into the market value of the fund to determine the new unit value. The average unit value over the past five years is multiplied by the number of units available at the valuation date to determine the value of assets at the valuation date. The actual value of assets used in the valuation is the middle value among book, market and the five-year average value, however, it cannot be lower than the five-year average value.

**PERCENTAGE MARRIED:** 50% of active members are assumed to be married and eligible for spouse's benefit with the husband assumed to be three years older than the wife. 40% of active members assumed to be married and elect spousal coverage for postretirement medical benefits.

**SEVERANCE PAY:** The valuation recognizes 100% of the effect of severance pay.

**EXPENSES:** None.

**PROJECTION ASSUMPTIONS:** The following additional assumptions were used in projecting the workforce. All other assumptions for projection purposes were identical to the valuation assumptions outlined above.

Workforce Size: Constant.

New Entrant Distribution: The new entrants are assumed to be all males distributed by age as follows:

<u>Age</u>	<u>Percent</u>	<u>2003 Compensation Level*</u>
20	5.0%	\$ 32,000
25	30.0	38,000
30	30.0	39,000
35	20.0	40,000
40	10.0	40,000
45	5.0	45,000

\*Increases at 5.0% per annum.

**Investments:** The total realized rate of return on adjusted assets was 9% per annum during the projection period.

**SCHEDULE B**

**BRIEF SUMMARY OF PRINCIPAL PLAN PROVISIONS  
AS INTERPRETED FOR VALUATION PURPOSES**

BRIEF SUMMARY OF PRINCIPAL PLAN PROVISIONS  
AS INTERPRETED FOR VALUATION PURPOSES

1 - GENERAL

Plan Name	New Hampshire Retirement System.
Effective Date	July 1, 1967.
Membership	Prospectively, any employee, teacher, permanent policeman or permanent fireman becomes a member as a condition of employment; except in the case of elected officials or officials appointed for fixed terms, membership is optional.
Average Final Compensation (AFC)	Average annual compensation during highest 3 years.

2 - BENEFITS

GROUP I MEMBERS (EMPLOYEES AND TEACHERS)

Service Retirement	
Eligibility	Age 60.
Amount of Benefit	<p>A member annuity equal to the actuarial equivalent of the member's accumulated contributions plus a state annuity.</p> <p>Prior to the member's attainment of age 65, the state annuity, together with the member annuity, shall be equal to 1/60 of AFC multiplied by years of service.</p> <p>After attainment of age 65, the state annuity, together with the member annuity, shall be equal to 1/66 of AFC multiplied by years of service.</p>
Reduced Service Retirement	
Eligibility	Age plus service of at least 70, provided the member has at least 20 years of service or age 50 with at least 10 years of service.
Amount of Benefit	Service retirement benefit reduced by the following percents for each month that benefits commence prior to age 60.

<u>Years of Service at Retirement</u>	<u>Monthly Percent Reduction</u>
35 or more	1/8 of 1%
30 - 35	1/4 of 1%
25 - 30	1/3 of 1%
20 - 25	5/12 of 1%
less than 20	5/9 of 1%

#### Ordinary Disability Retirement

Eligibility	10 years of service and permanent disability.
Amount of Benefit	Service retirement benefit if age 60, otherwise a member annuity plus a state annuity which together equals 1.5% of AFC multiplied by the number of years of creditable service at the time of disability; provided that the benefit shall not be less than 25% of AFC.

#### Accidental Disability Retirement

Eligibility	Permanently disabled due to accident occurring while in the performance of duty.
Amount of Benefit	Service retirement benefit if age 60, otherwise a member annuity plus a state annuity which together equals 50% of AFC; provided that the benefit shall not be less than 50% of AFC.

#### Ordinary Death Benefit

Eligibility	Death, other than accidental death.
Amount of Benefit	<p>(a) If 10 years of service or if eligible for service retirement and,</p> <p>(i) if survived by a spouse, 50% of the service retirement benefit payable until death or remarriage;</p> <p>(ii) if no surviving spouse or member designated a beneficiary other than his spouse, a lump sum equal to the greater of \$3,600 or the member's annual compensation.</p>



- (b) If less than 10 years of service and if not eligible for service retirement, a lump sum equal to the greater of \$3,600 or the member's annual compensation.

#### Accidental Death Benefit

##### Eligibility

Accidental death occurring while in the performance of duty.

##### Amount of Benefit

Benefit equal to 50% of AFC.

#### Vested Deferred Retirement

##### Eligibility

10 years of service, if no withdrawal of contributions.

##### Amount of Benefit

Payable at age 60, a member annuity plus a state annuity which together equals the service retirement benefit that would be payable after age 60. The benefit changes at age 65 as for service retirement. At any time after attainment of age 50, a member may have his benefit commence early, however, the benefit will be reduced for early commencement using the same early retirement reduction factors as described under reduced service retirement.

#### Return of Members' Contributions

- (a) Upon termination of service other than for retirement or death, and if vested deferred retirement has not been elected, the member's accumulated contributions are returned to him.
- (b) Upon accidental death or upon other death for which no surviving spouse's benefit is payable, the member's accumulated contributions will be paid to the member's beneficiary or estate.
- (c) Upon death prior to age 60 of a member on deferred vested retirement, the member's accumulated contributions will be paid to the member's beneficiary or estate.
- (d) Upon death of a retired member (or the survivor of a retired member, if an optional benefit was elected), the excess of his accumulated contributions at retirement over the benefits received by the retired member (and, in the case of election of an optional benefit, the benefits received by the survivor) will be paid to the beneficiary or estate of the member.

Special Provisions Applicable  
to Certain Members Transferred  
from the Employees' Retirement  
System of the State of New  
Hampshire

Certain employee members transferred to the New Hampshire Retirement System effective January 1, 1976 have elected to have their benefits calculated on the basis of the provisions of the Predecessor System.

GROUP II MEMBERS (POLICEMEN AND FIREMEN)

Service Retirement

Eligibility Age 45 and 20 years service or age 60 if earlier (age 65 before July 1, 1989) regardless of the number of years of service.

Amount of Benefit A member annuity equal to the actuarial equivalent of the member's accumulated contributions plus a state annuity which together with the member annuity is equal to  $2\frac{1}{2}\%$  of AFC times years of service, but not more than 40 years. Effective July 1, 1992, if a member retires on a full service retirement, the minimum annual benefit (prior to reduction for optional form of payment) is \$5,200. The minimum annual benefit is reduced for benefits payable from Social Security and from any public body benefits.

Ordinary Disability Retirement

Eligibility 10 years service and permanent disability.

Amount of Benefit A member annuity plus a state annuity which together equals the service retirement benefit; provided that the benefit shall not be less than 25% of the member's annual compensation.

Accidental Disability Retirement

Eligibility Permanent disability occurring while in the performance of duty.

Amount of Benefit A member annuity as for service retirement plus a state annuity which together with the member annuity is equal to  $\frac{2}{3}$  of AFC. If a member has completed more than  $26\frac{2}{3}$  years of service, then a supplemental disability allowance will also be paid equal to  $2\frac{1}{2}\%$  of AFC multiplied by service in excess of  $26\frac{2}{3}$  years but not in excess of 40 years.

Ordinary Death Benefit

Eligibility Death other than accidental death.

Amount of Benefit	<p>(a) If 10 years of service or if eligible for service retirement and,</p> <p>(i) if survived by a spouse, 50% of the service retirement benefit payable until death or remarriage.</p> <p>(ii) if no surviving spouse or member designated a beneficiary other than his spouse, a lump sum equal to the greater of \$3,600 or member's annual compensation.</p> <p>(b) If less than 10 years of service and not eligible for service retirement, a lump sum equal to the greater of \$3,600 or the member's annual compensation.</p>						
Accidental Death Benefit							
Eligibility	Accidental death occurring while in the performance of duty.						
Amount of Benefit	50% of the annual rate of compensation payable first to spouse until death or remarriage, then to children under age 18 or if no spouse or children, to dependent parent.						
Death after Retirement	<p><u>Retirement Prior to April 1, 1987</u></p> <p>Lump sum of \$3,600 unless accidental disability retirement, then surviving spouse receives 50% of the retired member's disability benefits payable until death or remarriage.</p> <p><u>Retirement on or after April 1, 1987</u></p> <p>Benefit payable to surviving spouse until death or remarriage equal to 50% of the member's service, ordinary disability or accidental disability retirement allowance if member was married on the date of retirement plus a lump sum. The lump sum shall be equal to:</p> <table> <tr> <td>If retired prior to July 1, 1988:</td><td>\$ 3,600</td></tr> <tr> <td>If retired on or after July 1, 1988:</td><td></td></tr> <tr> <td>    If Group II member as of June 30, 1988</td><td>\$10,000</td></tr> </table>	If retired prior to July 1, 1988:	\$ 3,600	If retired on or after July 1, 1988:		If Group II member as of June 30, 1988	\$10,000
If retired prior to July 1, 1988:	\$ 3,600						
If retired on or after July 1, 1988:							
If Group II member as of June 30, 1988	\$10,000						

If becomes a Group II member  
after June 30, 1988 and prior  
to July 1, 1993

\$ 3,600

Special Death Benefit - Old Firemen's  
System

Continuance of duty-connected disability benefits to spouse  
of deceased retired member payable until death or  
remarriage.

Vested Deferred Retirement

Eligibility

10 years of service, if no withdrawal of contributions.

Amount of Benefit

A benefit determined as for service retirement payable when  
the member would be age 45 with 20 years of service or age  
60 if earlier.

Return of Members'

Contributions

- (a) Upon termination of service other than for retirement  
or death, and if vested deferred retirement has not  
been elected, the member's accumulated contributions  
are returned to the member.
- (b) Upon accidental death or upon other death for which  
no surviving spouse's benefit is payable, the member's  
accumulated contributions will be paid to the  
member's beneficiary or estate.
- (c) Upon death of a member on vested deferred  
retirement prior to the time benefits commence, the  
member's accumulated contributions will be paid to  
the member's beneficiary or estate.
- (d) Upon death of the survivor of a member retired on  
accidental disability and his spouse in receipt of the  
accidental disability survivor benefit, the excess of the  
member's accumulated contributions at retirement  
over the benefits received by the member and his  
spouse will be paid to his beneficiary or estate.
- (e) Upon death of a retired member (or the survivor of a  
retired member, if an optional benefit was elected),  
the excess of accumulated contributions at retirement  
over the benefits received by the retired member (and,

in the case of election of an optional benefit, the benefits received by the survivor) will be paid to the beneficiary or estate of the member.

#### Benefits for Call Firemen

Accidental Disability	Annual benefit not to exceed \$1,250 if permanently disabled while in the performance of duty.
Accidental Death	Annual benefit not to exceed \$1,250 if death as a result of injury received while in the performance of duty. Paid to spouse until death or remarriage, then to children until age 18 or if no spouse or children under 18, to the dependent parent.
Death after Accidental Disability	Upon death of a call fireman receiving accidental disability benefits, the benefit will continue to be paid to the spouse until death or remarriage, then to children under age 18.

### 3 - CONTRIBUTIONS

#### GROUP I MEMBERS (EMPLOYEES AND TEACHERS)

##### By Members

5.00% of compensation.

##### By Employer

For Employee Members	100% of the normal contribution rate for their employees plus accrued liability contributions, if any.
For Teacher Members	65% of the normal contribution rate for their employees plus 65% of the accrued liability contributions, if any.

By the State

For Employee Members

100% of the normal contribution rate for its employees plus accrued liability contributions, plus any delinquent accrued liability contributions.

For Teacher Members

35% of the normal contribution rate for the employees of the employing subdivisions plus 35% of the accrued liability contributions, if any, plus any delinquent accrued liability contributions. In the case of teacher members employed by the state, the state shall pay 100% of both the normal and accrued liability contributions, if any.

GROUP II MEMBERS (POLICEMEN AND FIREMEN)

By Members

Policemen and Firemen

9.30% of compensation.

Call Firemen

\$6 per year (not refundable).

By Employing Subdivisions

65% of the normal contribution rate for their employees plus 65% of the accrued liability contributions, if any.

By the State

35% of the normal contribution rate for the employees of the employing subdivision plus 35% accrued liability contributions, if any, plus any delinquent accrued liability contributions. In the case of Group II members employed by the state, the state shall pay 100% of both the normal and accrued liability contributions, if any.

**SCHEDULE C**

**DEVELOPMENT OF ASSET VALUES**



**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**Five Year Moving Market Value**

Valuation Date (VD)	<u>06/30/00</u>	<u>06/30/01</u>	<u>06/30/02</u>	<u>06/30/03</u>	<u>06/30/04</u>
Market Value at VD	4,735,152,851	4,314,075,602	3,920,012,518	3,881,937,530	4,366,262,455
Contributions	156,531,138	167,119,978	191,207,739	202,608,360	247,440,183
Investment Income	101,761,016	122,866,514	121,002,963	106,113,082	96,824,208
Disbursements	205,097,274	230,165,486	263,699,251	287,855,235	316,280,152
Cash Flow	53,194,880	59,821,006	48,511,451	20,866,207	27,984,239
Units Acquired	152,124	155,743	140,377	67,198	91,488
Units Held	12,327,801	12,483,544	12,623,921	12,691,119	12,782,607
Unit Value	384.10	345.58	310.52	305.88	341.58
5 Year Average Unit Value	314.30	334.94	341.22	339.15	337.53
Preliminary Value	3,874,627,854	4,181,238,227	4,307,534,324	4,304,193,009	4,314,513,341
Book Value	4,092,995,534	4,073,812,303	3,927,435,336	3,732,589,158	3,892,018,104
Valuation Assets	4,092,995,534	4,181,238,227	4,307,534,324	4,304,193,009	4,314,513,341
Return on Valuation Assets	-----				
Investment Increase	597,942,579	151,288,201	198,787,609	81,905,560	79,160,301
Return	16.99%	3.72%	4.80%	1.92%	1.85%
Actuarial Gain (Loss)	263,601,525	(235,066,076)	(194,646,200)	(323,356,325)	(327,338,542)
Excess Over Assumed	7.49%	-5.78%	-4.70%	-7.58%	-7.65%

\* After the adjustment for the asset write up.

For 6/30/00, excludes receivable contributions of \$19,131,036.

For 6/30/01, excludes receivable contributions of \$20,666,089.

For 6/30/02, excludes receivable contributions of \$16,463,086.

For 6/30/03, excludes receivable contributions of \$ 19,743,431.

For 6/30/04, excludes receivable contributions of \$ 25,023,742.

**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**VALUATION ASSETS AVAILABLE FOR PENSION BENEFITS AS OF JUNE 30, 2004**

	<u>EMPLOYEES</u>	<u>TEACHERS</u>	<u>POLICEMEN</u>	<u>FIREMEN</u>	<u>TOTAL</u>
Allocated Valuation Assets	\$ 1,308,434,476	\$ 1,690,601,252	\$ 862,698,527	\$ 452,779,086	\$ 4,314,513,341
- Special Account	96,241,440	119,071,116	43,567,791	41,954,962	300,835,309
- Medical Special Account	91,778,202	95,531,030	105,150,332	54,230,095	346,689,659
- 401(h) Actuarial Value of Assets	7,182,275	11,824,770	42,513,955	30,175,678	91,696,678
+ Receivable contribution	7,085,402	11,432,338	4,022,180	2,483,822	25,023,742
Net Assets Available for Pension Benefits	\$ 1,120,317,961	\$ 1,475,606,674	\$ 675,488,629	\$ 328,902,173	\$ 3,600,315,437

**NEW HAMPSHIRE RETIREMENT SYSTEM**  
**SPECIAL ACCOUNT RECONCILIATION AS OF JUNE 30, 2004**  
**(IN MILLIONS \$)**

Classification	Balance as of June 30, 2003	Interest	Asset Gain	Benefits Purchased*	Balance as of June 30, 2004
Employees					
State	\$ 61.1	\$ 1.1	\$ 0.0	\$ 4.5	\$ 57.7
Political Subdivision	40.1	0.7	0.0	2.3	38.5
Teachers	124.2	2.3	0.0	7.4	119.1
Policemen					
State	15.1	0.3	0.0	2.0	13.4
Political Subdivision	33.2	0.6	0.0	3.7	30.1
Firemen					
State	1.4	0.0	0.0	0.2	1.2
Political Subdivision	46.3	0.9	0.0	6.4	40.8
	\$ 321.4	\$ 5.9	\$ 0.0	\$ 26.5	\$ 300.8

\* Benefits purchased for legislation enacted on or before June 30, 2004 (in millions):

Classification	Chapter 191ø July 1, 2003 COLA	Chapter 146 Group II Medical Benefits	Grand Total
Effective Date	7/1/2004	7/1/2004	
Employees			
State	\$ 4.5	\$ 0.0	\$ 4.5
Political Subdivision	2.3	0.0	2.3
Teachers	7.4	0.0	7.4
Policemen			
State	1.6	0.4	2.0
Political Subdivision	2.9	0.8	3.7
Firemen			
State	0.2	0.0	0.2
Political Subdivision	5.9	0.5	6.4
	\$ 24.8	\$ 1.7	\$ 26.5

ø Laws of 1993.